



As I see it

URBAN LAND IS A MANUFACTURED PRODUCT

URBAN land is a manufactured product for which there is a limited demand. There is no practical limit to the amount which can be manufactured, as the raw materials out of which it is made are almost unlimited. This may come as a surprise to some home builders who complain that we are running out of buildable lots, and to industrial Realtors who have difficulty in finding suitable industrial sites for some of their clients.

The raw materials out of which urban land is manufactured consist generally of rural land, cement, sand and gravel, reinforcing rods, pipes of various types and kinds, and wires. The tools used in the manufacturing process consist, primarily, of earth-moving equipment such as scrapers, bulldozers, ditchers, etc.

Demand is the limiting factor on production, and this bulletin is concerned, primarily, with the natural limitations which tend to limit the manufacturing process.

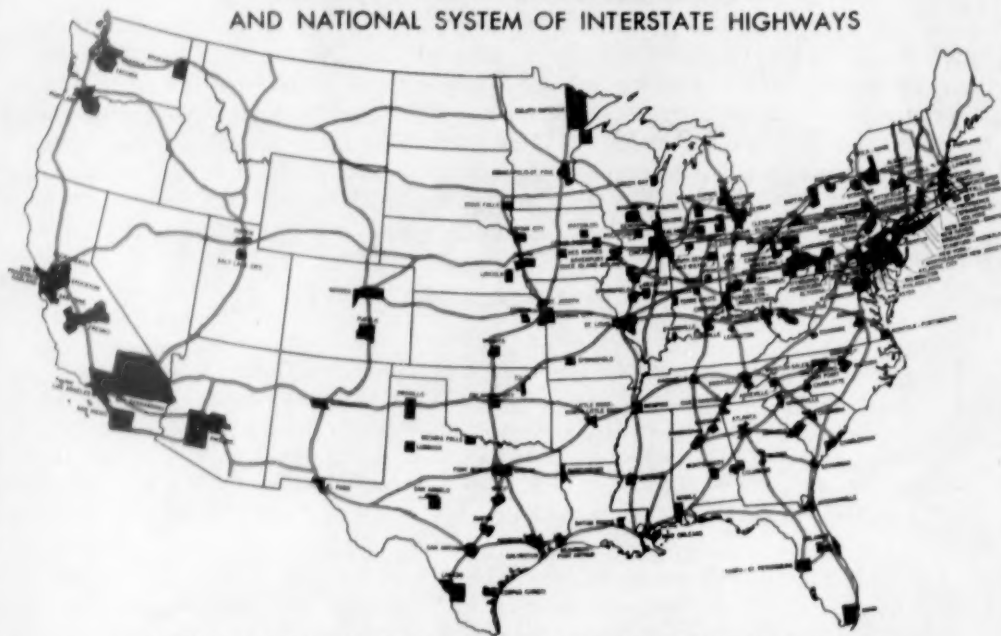
Various methods of transportation have revolutionized and decentralized our cities. Every increase in efficiency in planes, trains, busses, trucks and automobiles, and every betterment and increase in highways, streets, bridges and tunnels make it possible to manufacture additional urban land.

There has been a great deal written during the past few years on the fact that the United States is developing many "strip cities," and it has been pointed out that a person can start driving south from Boston, pass through the various communities in Connecticut, go through New York City to Philadelphia, to Baltimore, to Washington, without ever leaving an urban area.

It is undoubtedly true that many of our principal cities are growing toward each other along major highways, and eventually there will be many strips like the Boston to Washington area, which, at least along the main road, will present the appearance of a continuous city.

The map at the top of the following page shows the 168 metropolitan areas of the United States as defined by the census. In the census definition, counties are rarely split, which means that most metropolitan areas so defined, will con-

STANDARD METROPOLITAN AREAS - 1950
AND NATIONAL SYSTEM OF INTERSTATE HIGHWAYS



URBAN LAND CONTRASTED WITH AREA OF THE UNITED STATES



SMALL CENTER CIRCLE (diameter 192.36 miles) = area of all urban places in U. S.
CENTER RING (width 23 miles) = area of rural villages and towns, U.S.
LARGE CIRCLE (diameter 514.25 miles) = area of 168 standard metropolitan areas

sist of one or more counties in which a considerable degree of urbanization has taken place. We have superimposed on this map 41,000 miles of our interstate highway system which is now being developed and which is expected to be completed by 1971. Since there will be a tendency for many industries to decentralize from highly congested areas, it is probable that these industries will locate on these highways close to metropolitan areas. Residential developments to house the workers in these industries will also spread along this highway pattern, giving some justification to the idea that our population will eventually consist of strip cities covering many portions of the United States.

To study the upper map alone, however, might convey some erroneous conclusions. Urban land is not in short supply. The lower map on the page opposite is offered as an antidote to the first. This map contains three concentric circles. The larger circle has a radius of 257 miles. It incloses an area of 207,583 square miles, which is exactly equivalent to the combined area of the 168 metropolitan areas as defined by the census, and as shown on the upper map. If all of these metropolitan areas had a density of 20 persons per acre, the density equal to that of the city of Milwaukee, these 168 metropolitan areas of the United States could house the entire population of the globe. The small blue circle in the center indicates the area in the United States which is actually developed for urban use at the present time. This circle is 96 miles in radius. Using the latest census estimates from March 1956, 96,235,000 persons lived in these built-up urban areas. If these areas had the same density as the city of Milwaukee, this circle, 192 miles in diameter, could contain the entire population of the United States, the United Kingdom, Ireland, France, Spain, West Germany, Switzerland, the Netherlands, Norway, Sweden, and Denmark.

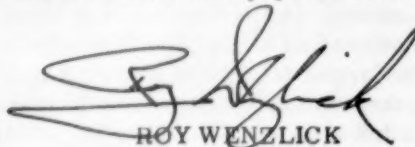
Around the central blue circle on the map is a white area of roughly 10 million acres which is equivalent to all of the land in rural villages and towns in the United States. If, in the course of time, this area also developed with the density of population in Milwaukee, this strip would be sufficient to house all of the population in the U.S.S.R.

Milwaukee was not selected because of the density of its population. Its density is far less than that of many other large cities in the United States and its 20 persons per acre is less than one-sixth the density per acre on Manhattan Island. If it were to be assumed that the existing urban developments represented by the inner circle on our map would ever reach the density per acre now existing on Manhattan Island, this 192-mile-diameter circle could house 2,343,600,000 people.

These illustrations, using the density of the city of Milwaukee and of the Island of Manhattan, are not used with the idea that all urbanized areas in the United States will approach these levels, but to emphasize the fact that potential urban land exceeds any potential demand.

One criticism I have often made of attractive models of new city developments is that many of them show new office buildings and apartments in the re-developed areas which will house more office workers in the office buildings and more tenants in the apartments than are available in the market. A beautiful model made some years ago of a riverfront development in a Midwestern city showed new buildings lining the development which contained many more square feet of rentable area than all of the existing office buildings in that city contained.

It seems to me, that in planning for the period ahead, realizing that our cities are spreading out and will continue to grow toward each other, we should still remember that within any reasonable period of years there will not be sufficient population to bring about the degree of urbanization which many planners envisage.



ROY WENZLICK

STATISTICAL BACKGROUND DATA

| | Square miles | Acres |
|--|--------------|-------------|
| Area of 168 standard metropolitan areas (large circle, diameter 514.25 miles) | 207,583 | 132,853,000 |
| Area of all urban places in U. S. (small center circle, diameter 192.36 miles) | 29,062 | 18,600,000 |
| Area of rural villages and towns, U. S. (center ring, width 23 miles) | 15,625 | 10,000,000 |

Density of city of Milwaukee, 1950 = 20 persons per acre

Area of large circle (132,853,000 acres) \times 20 = 2,657,060,000

World population, 1955 = 2,689,000,000

Area of small circle (18,600,000 acres) \times 20 = 372,000,000, roughly equivalent to population of the following countries:

| | | | |
|-------------------------|-------------|--------------------------|-------------|
| United States | 164,303,000 | Spain | 28,976,000 |
| Denmark | 4,439,000 | Sweden | 7,290,000 |
| France | 43,300,000 | Switzerland | 4,978,000 |
| Ireland | 2,909,000 | United Kingdom | 51,221,000 |
| Netherlands | 10,809,000 | West Germany | 49,995,000 |
| Norway | 3,450,000 | Total | 371,670,000 |

Area of center ring (10,000,000 acres) \times 20 = 200,000,000, roughly equivalent to population of U. S. S. R. (200,200,000)